

A review by the Federal Reserve Bank of Chicago

Business Conditions

1960 April



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THE Trend OF BUSINESS

Probably the most significant economic development of the first quarter of 1960 concerned business plans to invest in new plant and equipment. Inventories were rising rapidly in certain lines early in the year. As a result, some businesses announced cutbacks in orders and production schedules in February and March. Nevertheless, the rate of capital outlays is rising as business firms go ahead with projects to expand and modernize facilities.

Other noteworthy developments included the continued rise in employment and income to record levels. Unemployment in February, seasonally adjusted, was the lowest since the start of the 1957 recession.

Retail sales have risen less over the past year than personal income, but there were explanations for the lag in spending. Weather was unusually severe in February and early March, thereby hampering shopping. Virus illnesses were widespread, affecting both absences from work and, presumably, shopping activities. The Census Department estimated the number of absentees in mid-February at 2.7 million, up 400,000 from January. Even so, total retail sales for the first two months of the year were at a new high—3 per cent above last year's record level. This showing, while favorable, is less strong than the rise in personal income, which was up 6 per cent over last year. Several recent surveys of consumer buying plans have shown intentions to increase purchases. Sales of homes, autos and homefurnishings will

improve as the year moves on if consumers carry out their intentions.

A factor influencing current business trends is the cooling of last year's fears concerning price inflation. The ready availability of virtually all types of goods has restrained price advances. Prices have been raised for a variety of manufactured goods—including textiles, carpets, tires, farm equipment and construction machinery—since the start of the year. But these increases have been offset, through March, in the wholesale price index by cuts in petroleum products, lumber, steel scrap, copper and hides.

Evidence of over-all price stability, instead of the "creeping inflation" widely anticipated, may dampen business ebullience temporarily. But in the longer run, most observers believe that price stability offers the best environment for sustained growth of the economy.

Capital expenditures increasing

A recent survey indicates that business capital expenditures in 1960 will total 37 billion dollars—up 14 per cent over 1959. This is almost exactly the same as in the previous record year, 1957. It should be noted, however, that prices have risen somewhat since then.

This estimate of plant and equipment outlays is based upon reports of a large number of business firms. It includes only domestic expenditures on new equipment and construction which are charged on the books of a firm as a fixed asset. It does not

include capital outlays of farmers, nonprofit organizations, home owners or governments.

Plant and equipment outlays currently are equal to about 7½ per cent of all spending on goods and services. But they constitute one of the most volatile segments of spending and bear close watching in evaluations of business trends.

During 1959, capital expenditures rose nearly 7 per cent from the reduced level of 1958. This was virtually the same rise as recorded in 1955—the first year of recovery from the 1954 recession.

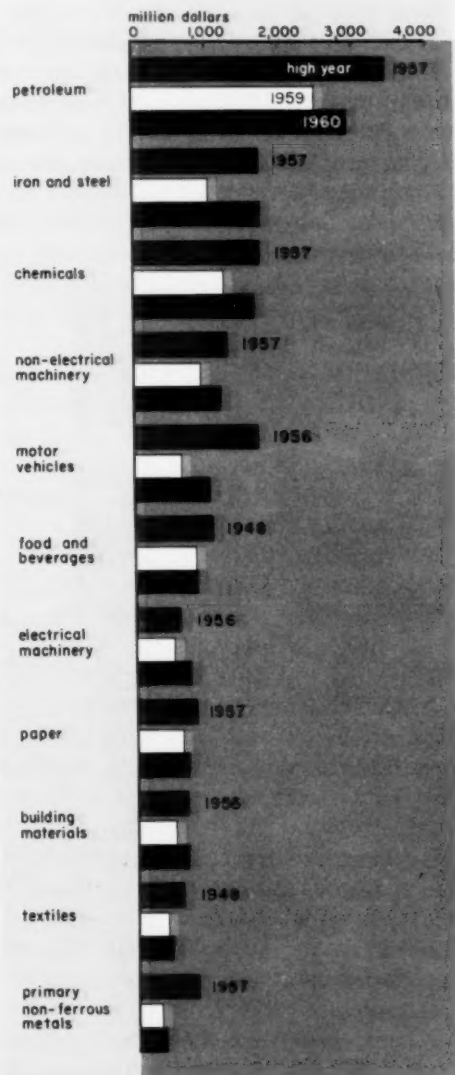
In March of 1956, the capital expenditure survey projected a 22 per cent increase in spending. Although there were offsetting errors for particular categories, this total was realized almost exactly. The indicated rise announced in the spring of 1956 was greeted with some skepticism, not merely because of its large size, but also because there was considerable speculation at the time that a recession was under way.

The projected increase in capital expenditures is broadly based. At least a moderate rise is projected for each of the major industrial categories. Also, there appears to have been some improvement in long-run expectations since last November.

It is notable that one of the largest increases in capital spending for 1960 is expected to come in the primary iron and steel group which is commonly thought to have some excess ingot capacity. Spending in iron and steel is expected to rise by 67 per cent and to equal or exceed the record 1957 level.

The auto industry, while capable of turning out far more cars than it can sell, has nevertheless reported plans to increase capital expenditures by 59 per cent to more than 1 billion dollars. The petroleum industry, with ample refining capacity, plans to increase spending by 18 per cent.

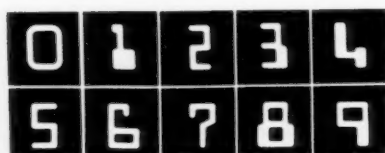
Capital expenditures in all major lines to exceed last year, but most categories will be below earlier record highs



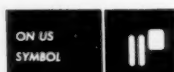
Only a small proportion of the expenditures this year will be for addition to basic capacity. All major types of raw materials are now in ample supply. However, substantial outlays will increase capacity for certain standard products, such as tin plate, galvanized sheet and cold-rolled sheet. These items have not been in adequate supply in periods of peak demand regardless of the industry's large ingot capacity. In other cases, outlays are needed for new or improved products, such as the aluminum engines and unitized body frames in the auto

industry. But perhaps the largest share of capital goods outlays will be used to cut costs or improve quality.

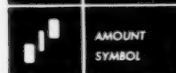
How firm are these intentions? Probably fairly firm according to past experience. New orders for industrial machinery and contracts awarded for commercial and industrial construction continue well above year-ago levels. A Chicago consultant on factory location states that his firm's backlog is the greatest in its history. Usually this firm's services are retained a year or more before "ground is broken" on new construction.



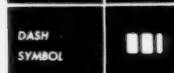
TRANSIT
NUMBER
SYMBOL



ON US
SYMBOL



AMOUNT
SYMBOL



DASH
SYMBOL

Automatic check clearing on the threshold!

The number of checks handled by the nation's banks has been increasing rapidly as more and more individuals and businesses turn to this convenient means of making money payments. At present, there are about 52 million checking accounts in the United States. The number has been rising and the accounts are being used more intensively. The Federal Reserve Bank of Chicago alone processes an average of almost 2 million checks a day.

More than 10 billion checks will be cleared in the nation this year, and the typical check

will be sorted and proved many times before its round trip from drawer to payee and back to drawer is completed. Moreover, by 1970, the present volume is expected to double—to 20 billion checks annually. The rapid growth in volume of checks, and the prospect that the growth will continue, has made the processing of checks a matter of intensive study by bankers and office machine manufacturers for many years. A new method of check handling has now been developed that is expected to meet the challenge of the rising volume and help banking to keep pace with

the accelerating needs of modern business.

MICR "common language"

The heart of the new technique is a machine which has the ability to "read" a system of symbols and numerals which, although slightly different from conventional numbers, are easily read by human eyes as well. Information pertinent to the clearing process is printed on the check forms in magnetic ink (ink containing iron oxide). This information can be read directly from checks by the processing machines.

The successful development of this system is a result of the cooperation of many business groups—individual banks, the American Bankers Association and other banking organizations, check printers, business machine manufacturers and the Federal Reserve System—which have worked together to bring automation to the processing of checks.

The system has been named Magnetic Ink Character Recognition, popularly shortened to MICR. The information necessary for electronic processing must be printed on the checks in a designated area in language which the machines can read. Detailed specifications for preprinting have been worked out by the American Bankers Association's Technical Committee on Mechanization of Check Handling.

From the standpoint of the check collection system of the country, the most important information to be printed on the check forms is the routing symbol-transit number of the bank on which the check is

drawn. This number has been an important aid in the manual sorting of checks and will be retained in its usual location on the check forms. In addition, it is now urged that the routing symbol-transit number also be preprinted on checks in magnetic ink in an approved location so that they can be handled by the new electronic equipment. Space has also been allotted on the proposed new check forms for the preprinting in magnetic ink of customer account numbers. This will be of benefit to banks planning to install compatible electronic accounting equipment for their internal bookkeeping. The position of this information is shown on the accompanying illustration. The new equipment is designed to accommodate checks of various sizes, within limits.

As the checks pass through the high-speed equipment, the magnetic ink characters receive an electrical charge. Thus magnetized, they emit signals to a reading head which, in turn, activates a computer that performs the designated sorting and proving tasks.

Use of magnetic ink essential

Before the end of this year, pilot installations for electronic check processing will be

Diagram illustrating the layout of a check form for MICR (Magnetic Ink Character Recognition) data. The form includes fields for DATE, NAME OF BANK, CITY AND STATE, PAY TO THE ORDER OF, and DOLLARS. At the bottom, there are three ovals representing MICR data: the first contains the routing symbol-transit number (1234-5678), the second is reserved for the customer's account number, and the third is reserved for the amount of the check.

in operation in five Federal Reserve Banks—Boston, New York, Philadelphia, Chicago and San Francisco. These installations will test the equipment of various manufacturers under operating conditions. But the success of the program depends on the active cooperation and participation of both the banks and the check-using public. Automation is possible only if checks bear the essential information in a language the machines can read. Every bank can contribute to the maintenance of an efficient check-handling system by having its routing symbol-transit number printed on its checks in magnetic ink characters and by encouraging any customers

who arrange for the printing of their own checks to do the same. To provide for this need, banks are urged to give immediate consideration to preprinting checks in magnetic ink and to consult with printers regarding any necessary redesigning of the check forms.

The change-over to the automated handling of checks will not, of course, come over night, but it is hoped that by the end of 1960 many banks will have made substantial progress in the use of checks encoded in magnetic ink. The new equipment can be tested under actual operating conditions only if a sizable volume of encoded checks is provided.

Savings institutions shift investment portfolios

As consumer purchases of homes and durable goods climbed from recession lows in 1958 and yields on Government securities moved upward, the rate of growth at savings institutions slackened. Although the inflow of funds to time accounts at commercial and mutual savings banks, and share purchases at savings and loan associations and credit unions showed only small changes, withdrawals rose quite sharply. Other financial institutions also reported a rise in outflow. Life insurance companies and retirement funds, for example, have reported larger benefit payments, though more from long-term growth than cyclical influences.

The customers of banks, and share owners of savings and loan associations and credit

unions have come to expect immediate payment on requests to withdraw savings, even though these institutions are not required to meet such demands. In order to satisfy customer demands, these institutions plan that the cash inflow plus cash on hand will be sufficient to cover anticipated withdrawals as well as other cash disbursements. This, of course, means that a part of an institution's funds cannot be invested, and an additional portion usually is invested in readily salable assets such as short-term Government securities.

The liquidity requirements of commercial banks are of quite a different order from the other "over-the-counter" institutions, partly because a larger portion of their assets

consists of relatively active accounts. Savings growth declined more at commercial banks than at most other savings institutions during 1959. Based on data available for banks in the Seventh Federal Reserve District, withdrawal demand relative to gross inflow was especially high.

Insurance companies and pension and retirement funds usually do not have exposure to "withdrawals" as such, but must be in a position to honor the claims of policy holders and to meet other cash commitments. Their liquidity needs are smaller than for the "over-the-counter" group of savings institutions.

Developments in 1959

The more liquid assets, that is, cash and United States Government securities, were pared down during 1959. The rise in outflow

of funds exerted downward pressure on "cash positions." In addition, the higher interest rates available on new investments induced transfers of funds from cash into the higher-yielding assets. Also, the competition for new savings was intensified, as reflected in the wave of interest and dividend rate increases and the variety of promotions to attract funds.

For *savings and loan associations*, total holdings of cash and Governments were equal to 12 per cent of total share capital at the end of 1959. This was well above the 6 per cent ratio required of member associations by the Federal Home Loan Bank Board, but below the 15 per cent suggested in the report of a special committee of the United States Savings and Loan League in 1956. Furthermore, indebtedness of the savings and loan associations to the Federal

Home Loan Banks nearly doubled during 1959. If these borrowings are deducted from holdings of cash and Governments, the ratio to share capital is reduced to 8 per cent, compared with 10 per cent a year earlier.

The maturity of the mortgage portfolio has tended to lengthen. A recent report issued by the Savings and Loan League indicates that 22 per cent of savings and loan associations were making mortgages with an average maturity of between 21 and 25 years as of mid-1959, compared

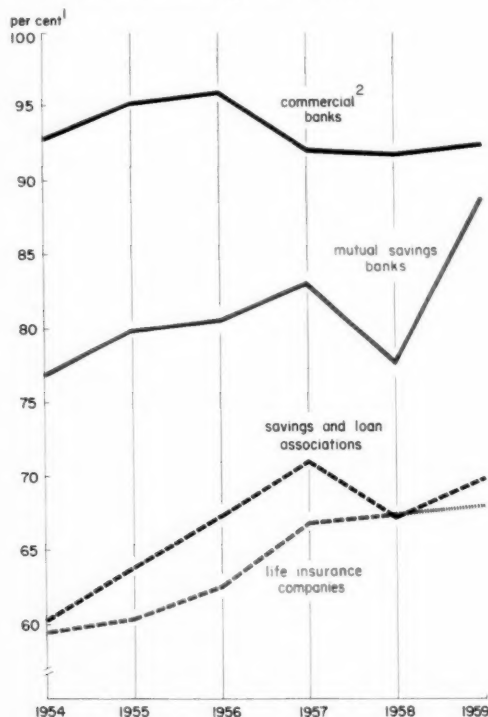
Savings institutions generally show slower growth during 1959

	Net increase in time deposits, share capital or insurance assets during calendar year			
	1958	1959	1958	1959
	(million dollars)		(per cent)	
Commercial banks ¹	7,053	2,157	12.5	3.4
Savings and loan associations	6,064	6,572	14.5	13.7
Life insurance companies	6,271	6,046	6.2	5.6
Private noninsured pension funds . .	2,780	3,400	14.4	15.4
Mutual savings banks ¹	2,348	936	7.4	2.8
Credit unions	537	603	14.1	13.9

¹Time deposits at commercial banks increased 700 million dollars and deposits at mutual savings banks declined 300 million as a result of bank structure changes and the addition of Alaska and Hawaii during 1959.

with 9 per cent a year earlier. A term of 25 years for conventional (noninsured) loans tends to be the maximum because of Federal Home Loan Bank regulations on collateral for advances. Conventionals constitute the major portion of the mortgage portfolio of these institutions. Moreover, conventionals have grown relative to the total mortgage portfolio, while FHA- and VA-guaranteed mortgages have declined.

Outflows have been growing relative to inflows at savings institutions



¹Withdrawals at banks, savings and loan associations and credit unions as a per cent of new savings; insurance disbursements to policy holders as a per cent of premium receipts.

²Relates to metropolitan areas and centers in the Seventh Federal Reserve District; national data used elsewhere.

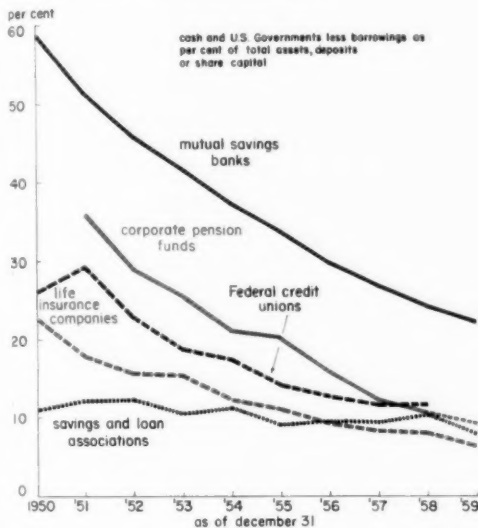
The changes in the Government securities holdings of savings and loan associations during 1959 were in the direction of improving liquidity. The increase in holdings of Government securities was about the same as the rise of 646 million dollars in 1958, but more of the net purchases were of short-term issues. However, their cash was reduced substantially, with the result that the net addition of cash and Governments in 1959 was less than one-fourth that in 1958.

At *mutual savings banks*, holdings of cash and Governments declined during 1959, in part because of net sales of bills and certificates in October. The "over-the-counter" savings institutions as a group experienced sizable withdrawals of funds in October as individuals drew down their balances to purchase the new Treasury issue of 5 per cent notes, but the impact was especially great on mutual savings banks.

Federally chartered *credit unions* have shown relatively larger holdings of cash and Governments than savings and loan associations throughout the postwar years. Credit unions may borrow from banks or other credit unions to meet heavy withdrawal demands. But they do not have access to Government-sponsored institutions, such as the savings and loan associations have with the Federal Home Loan Bank and member banks with the Federal Reserve Banks.

Liquidity needs of some credit unions are especially large because all their members are employed by the same firm. A credit union serving the employees of a plant shut down for an indefinite period because of strike or other reasons, for example, may find its cash position squeezed on the one hand by defaults or a moratorium in loan repayments and on the other by unusually large share withdrawals.

The proportion of assets in cash and Governments has declined throughout the past decade



Many credit unions own shares of insured savings and loan associations. The investment of Federally chartered credit unions in savings and loan shares has grown to more than three and one-half times their holdings of Government securities.

The bulk of credit union assets, however, is in short-term personal loans rather than long-term mortgages as in savings and loan associations. The scheduled pay-off of debt, therefore, is fairly rapid, but defaults could rise sharply under adverse conditions. As the portion of credit union funds loaned on automobile instalment paper has grown, the average maturity of loans has lengthened. The maximum term of loans authorized for Federal credit unions is five years, though contracts may be renewed or extended.

Life insurance companies switched funds

from Governments to higher-yielding assets during 1959. Holdings of Treasury bills and nonmarketable bonds in particular were reduced. This was in contrast to the increase in holdings of Governments during 1958. As a consequence, the portion of assets in cash and Governments dropped more during 1959 than during the preceding year. Holdings of mortgages and state and local government obligations expanded, with growth exceeding that of 1958. Corporate securities increased too, though slightly less than in 1958.

The ratio of cash and Governments to total assets of *corporate pension funds*, although higher than for most other types of savings institutions, has fallen sharply in the last ten years. Holdings of Governments have been reduced and a growing share of assets has been invested in corporate securities, especially common stocks. Mortgages, while accounting for only a small fraction of total assets, also have absorbed larger amounts.

Readjustment

As a group, then, savings institutions in 1959 showed rising outflows and declining proportions of assets in Governments. At insurance companies, the rise in outflow was largely due to the increase in maturing policies reflecting the growth over the years in insurance coverage and to a rise in policy loans. At the "over-the-counter" institutions, the increase in withdrawals was more a product of prosperity. As employment prospects improved and income rose, individuals were more inclined to draw upon their liquid reserves for the purchase of durables and for other purposes. Also, interest rates have moved upward and this has induced transfers from one form of saving to another.

The drop in combined holdings of cash and Governments places greater dependence

on a continuous stream of new savings and loan repayments to cover withdrawal requests, loan commitments and other cash requirements. Savings institutions have stepped up their promotional expenditures and have been offering savers higher rates of return, including an increasing number of "fringe benefits," such as crediting interest on minimum monthly instead of quarterly balances and an array of "give-aways." These new appeals may well stimulate new additions to savings and reduce withdrawals, but often the effect of these actions is temporary.

As 1959 progressed and withdrawals grew, savings institutions reduced somewhat the amount of funds committed for mortgage financing. Mortgages are the major part of

the investment portfolio of many of the savings institutions, and, with the upsurge in home building during 1958, a larger volume of new mortgage loans was acquired and advance commitments rose to new peaks. For the year as a whole, additions to mortgage loan portfolios exceeded net savings inflow and loan repayments at savings and loan associations and mutual savings banks. However, during the year, commitments had fallen, and, in the latter months of 1959, the net acquisition of mortgages slowed down. Net mortgage lending was declining and coming more in line with net savings gains. Thus, savings institutions may well find the pressures for further portfolio adjustments easing in the months ahead.

Farmers and farm surpluses

The trek from farm to city has been a familiar characteristic of the rural scene for many years. Like other population movements, this one has its ebbs and flows. In most years, there is a large movement from farm to nonfarm residences and a somewhat smaller movement in the opposite direction. The over-all result is a gradual but fairly persistent net migration from farms. Usually, the net migration has been greater than the "natural increase" in farm population, with the result that the number of persons living on farms has been trending downward since 1921.

In the postwar years, 1947-59, there was a net migration of about 11 million persons from farm to nonfarm residences. However, because of the excess of births over deaths in

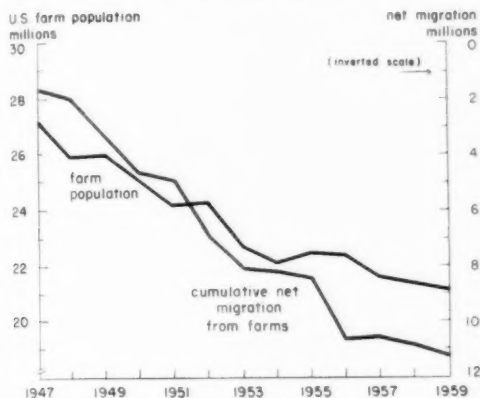
the farm population, the number of persons living on farms declined by only about half this number—from 27 million in 1947 to 21 million in 1959.

While the farm population has been dwindling, the nation's total population has continued to increase, so the proportion living on farms has declined rapidly. In 1947, one out of five persons lived on a farm; in 1959, one out of eight was a farm resident.

Farm output rising

Even though the farm population has been declining, the output of agricultural commodities has continued to rise and at a faster pace than consumption. To keep farm income from falling to distress levels, the

Farm population declined nearly 20 per cent in twelve years



Government has acquired large quantities of commodities and diverted them from commercial markets. Price support programs, in effect continuously since the early Thirties, have been alternately expanded and contracted and frequently have been supplemented with other kinds of programs which are also for the purpose of raising and stabilizing farm income. However, little progress has been made in bringing output and utilization of agricultural commodities into balance.

The spectacular improvements in technology and a high level of new investment in agriculture have more than doubled output per man-hour of farm labor in the postwar period, 1947-59, and offset any tendency for the decline in farm population to reduce total agricultural output. There can be no doubt, however, that output would have increased even more, and the downward pressure on farm income would have been even greater, if farm population had been rising instead of falling. Similarly, it is readily apparent that the shift of labor from agriculture, if carried far enough, would eliminate sur-

pluses of farm commodities and, if carried too far, would even result in shortages. Thus, any increase in the mobility of the farm population, assuming continued expansion of the economy over-all, should help to accelerate the shift of farm labor to nonagricultural pursuits. This would tend to boost incomes of farm residents and help to provide a workable solution to the persistent and costly agricultural surpluses. Not unimportant in this shift in the nation's labor force would be the greater output of nonagricultural commodities and services made possible by the accelerated growth of the nonfarm labor force.

Differences in mobility

Farm population has declined in all regions, but the decline has been more rapid in the South than elsewhere (see table). Mechanization of southern farms has come somewhat later than in other regions. Also, the shift of cotton from the small farms of the Southeast to the larger farms in the Southwest and West has greatly reduced the farm labor force in the South. Rapid industrial development since World War II has provided nonagricultural employment within the region, and there has been a large migration to other regions as knowledge of job prospects was acquired. In addition, the relatively low level of farm income in the South has, no doubt, been responsible in part for the higher rate of decline in farm population there.

The farm population is commonly thought to be very stable. However, when judged in terms of the proportion that moves to a different residence within a period of one year, the farm population shows a rather high mobility. Data collected in the 1950 Census of Population—the 1960 Census is being taken currently—indicate the proportion

may be as high as one-fifth if the moves from one farm to another, from farm to nonfarm residence and from nonfarm to farm residence are included.

In the Seventh Federal Reserve District, mobility is considerably lower than in the South or in the United States as a whole. It is significant, however, that more than 10 per cent of the farm population in the District states moved to a different residence during the one year, 1949-50. When a move is made, presumably consideration is given to all the alternatives of which the mover has knowledge at that time.

Michigan shows the greatest, and Iowa the lowest, mobility of farm population among the states in the Seventh Federal Reserve District. This is true whether measured in terms of proportion moving from one residence to another, from farm to nonfarm residences or the *net migration* from farms. Estimates of net migration, that is, the number moving from farm to nonfarm residence less the number moving from nonfarm to farm residences, as a percentage of total farm population in individual states in 1949-50, are as follows:

Illinois	2.4%	Michigan	6.1%
Indiana	2.2	Wisconsin	2.7
Iowa	0.9		

The net migration is relatively low because of the large number of moves from nonfarm to farm residences. Part of the "reverse flow"—from nonfarm to farm residence—consists of students and military service personnel returning to farm residences and part is the nonfarm residents who move to "a place in the country" which may qualify as a farm under the Bureau of the Census definition. But most of it probably represents former farm residents who were not assimilated effectively in urban communities.

Both farm population and number of farms have declined in all regions

Region	Per cent decline 1947 to 1958	
	Farm population	Number of farms
United States	23	19
South	28	21
North Central	19	15
West	17	12
Northeast	17	32

The proportion of farm population moving from farm to nonfarm residences is influenced by many factors, and these probably differ in importance as to both time and area. Among the more important are the availability of nonagricultural jobs, type of farm and level of farm income, impact of changes in technology, social ties to the community and knowledge of other communities.

Proximity to a city appears to be an important factor since most of the moves by the farm population are relatively short. Of the 260,000 who moved from farm to nonfarm residence in the Seventh District states in 1949-50, more than one-half did not move across a county line. Hence, the moves were largely to a near, rather than a distant, village or city. In Michigan, the District state having the greatest mobility of farm population and the steepest decline in number of farms in the postwar years, there were nine counties with cities of 50,000 or more population in 1950. Thus, much of the farm population in the state resides fairly close to an industrial center.

In Iowa, on the other hand, only five

Farms, farm population—what is included?

The data used in this article require a word of explanation. The farm population, quite understandably, consists of the people residing on farms. But what is a farm? This is answered in the Census of Population by the response to the question, "Is this house on a farm (or ranch)?" If answered "yes," the occupants are included in the farm population (unless they rent for cash, a home and yard only). A considerable number of persons in rural residences is believed to report that they live on farms, even though no agricultural commodities are produced on their "places."

The data on number of farms are based upon a different source—the Census of Agriculture. And in that report, a farm is defined as any place of 3 acres or more on which a minimum of \$150 of agricultural products are produced during the preceding year (excluding home garden produce). The data on farm population and number of

farms are not entirely comparable. The estimates of both farm population and number of farms for years between censuses are consistent with the concepts for the respective censuses.

Some improvement is in the offing. Beginning with 1960, a new definition of farm will be used in both the Census of Population and the Census of Agriculture, namely, "a place of 10 or more acres from which at least \$50 worth of agricultural products were sold in the reporting year, or, a place of less than 10 acres for which at least \$250 worth of agricultural products were sold." This will lower both the number of farms and the farm population and will make the two series more comparable than in the past. However, the figures for 1960 and succeeding years will not be comparable with earlier years and will still include many "places" and "persons" which, in fact, are not "farms" or "farmers."

counties had cities of 50,000 or more population. Furthermore, the farms of that state are relatively productive and this would be expected to retard migration from farms. However, in central Illinois, also an area of high land values and relatively high farm income, the mobility of the farm population appears to be quite high. As in Michigan, the farms in central Illinois are relatively close to urban centers. Also, large proportions of the farms specialize in the production of grain (have little or no livestock) and are operated by tenants. This may tend to increase mobility as compared with, for example, Iowa, where cattle and hogs are important and it is more difficult to shut

down and start up a farming operation than in a cash grain area. Furthermore, it is in the production of crops that the greatest strides have been made in mechanization; hence, the impact of mechanization on the farm labor force in the cash grain areas has been greater than in the livestock areas. This factor may explain the low mobility indicated in northern, as compared with central, Illinois.

In Wisconsin, the mobility of the farm population is considerably greater than in Iowa, and there has been a larger decline in the number of farms even though cattle are maintained on most farms. Proximity to urban centers probably is the major factor in the greater mobility of the Wisconsin farm

population. But there has been relatively rapid progress in mechanizing the "care of the dairy cow" and, hence, in boosting output per man-hour on dairy farms. Also, the income of dairy farmers, computed on an hourly basis, has been considerably lower than in the cattle-hog and cash grain areas. This probably helps to cast nonfarm employment in a rather favorable light for many farmers in dairy areas.

Can mobility be increased?

Studies of the farm population and the farm labor force, done at the University of Chicago, indicate that the rate of transfer from agricultural to nonagricultural jobs probably could be increased. Furthermore, it is estimated that an increase of about 60 per cent in the rate of annual net migration would about double the rate of reduction in the farm population and the farm labor force because of the reduction in proportion of young adults in the farm population and the effect this would have in reducing the natural rate of increase.

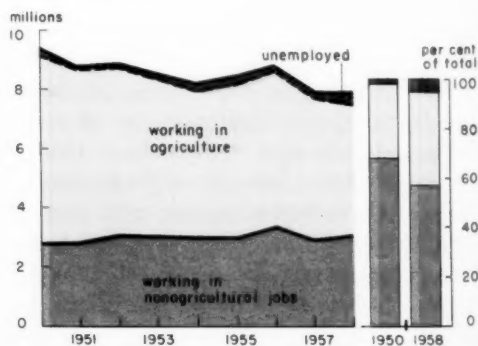
Since mobility is aided by proximity to urban centers, industrial development in the smaller cities in the hinterland would probably help to achieve desirable shifts in the labor force. This would be especially significant since workers could shift to nonagricultural jobs and continue to reside in their present farm residences. However, many of these centers have not been favorable locations for manufacturing. Hence, their prospects for growth appear limited. The potential growth of nonagricultural employment in these cities, therefore, while helpful, probably will not provide adequate employment for the labor which is available from the farm sector. To the extent that additional employment is not available in the areas having surplus labor, additional migration

is needed and at least a part of it, possibly a large part, will need to be fairly long moves.

In Iowa, for example, estimates made at the State University and based upon trends in recent years indicate that about 2,000 additional nonfarm jobs a year may be available to workers from the farm population in that state. However, about 13,000 workers will be available annually from the farm population. About one-third would result from a decline in farm labor force and two-thirds from the natural increase of the farm population. It is concluded, therefore, that a net average of about 11,000 Iowans are under pressure each year to find employment in other states.

Several types of activities have been proposed to increase the rate of migration from farms and improve the utilization of the labor force now on farms. Among these are: better information on the availability of nonfarm jobs; assistance in job counseling, training and placement; assistance in the location of housing; and, in the long run, better education of the population in rural areas.

Farm residents with nonagricultural jobs rising slowly as total labor force residing on farms declines



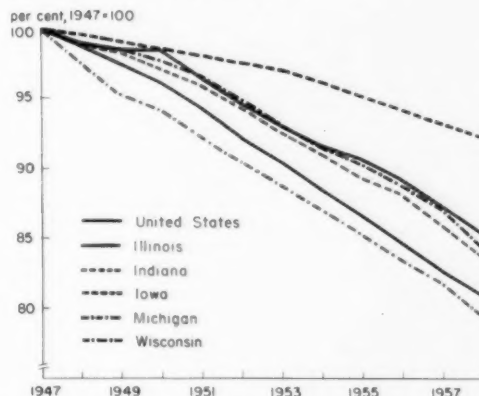
Information on job prospects in distant areas is not readily available to individuals. Farm to nonfarm movers have obtained such information mostly from friends and relatives. Employment services, public and private, have been of only limited assistance since they are oriented primarily to individual labor markets, not to movement between markets.

A large proportion of the movers from rural areas, the South in particular, have very limited schooling. This, together with the lack of reliable information on job prospects, may be the major cause of the large "reverse flow" of population from nonfarm to farm residences. More and better primary and secondary education would enhance the ability of farm families to adjust to urban conditions, and the range of jobs available to the farm migrants would be broadened significantly. Educational service, especially at the secondary level, could provide greater emphasis on the knowledge and skills which would be helpful in occupations other than agriculture. Also, in many areas, vocational training of adults for nonagricultural jobs would be helpful.

How many farmers?

While the number of farm workers required to produce the farm products needed for domestic consumption and export cannot be estimated precisely, it is clear that the recent rate of decline in number of farm workers could continue for some time without detracting very much from the total output of the nation's farms. In the absence of a large increase in the migration of farm workers, continued improvements in technology and its wider application by farmers may well result in a continuation of the imbalance between output and consumption of agricultural commodities.

The number of farms has declined less in Iowa than in other Midwest states, reflecting lower mobility of Iowa's farm population



About 30 per cent of the 4.8 million farms in the United States, as enumerated in the Census of Agriculture in 1954, was described as "part-time" or "residential" farms. Included in these categories are farms on which the operators' major source of income is from work off the farm and for which the sale of agricultural commodities did not exceed \$1,200 (\$250 for residential farms). These farms provided only about 1 per cent of the total agricultural commodities marketed in 1954. While the labor of many of the part-time and residential farmers probably is not utilized very effectively, this group can be ignored insofar as having any significant effect on the total supply of agricultural commodities. Moreover, it represents a group which has made a partial transition between farm and nonfarm employment.

About 70 per cent of the farms were classified as "commercial." These were farms on which the operators derived most of

their income from the farm and did not work off the farm more than 100 days during the year. Over 2 million of these, 43 per cent of *all* farms, had gross sales of farm commodities of less than \$5,000 and, as a group, provided 19 per cent of the total farm products marketed. The annual output of farm commodities is variously estimated to exceed the amount that could be sold at current prices by 5 to 10 per cent or more. It is possible that farm population and farm labor force equivalent to that on about two-fifths of the nation's farms—60 per cent of the "commercial" farms—could shift to non-agricultural employment without reducing farm output below the amount which could be sold commercially at reasonable prices for domestic consumption and export. In fact, such a shift probably would enable many farmers to further exploit improved technology as they acquired the land released by the migrants. This could make possible an even greater reduction of farm labor force before a balance between farm output and consumption of farm commodities was achieved.

The effects on *total* farm income probably would not be important until output was balanced with demand at prices above the current level, although any reduction of current output would tend to reduce the cost of farm price support programs. On the other hand, any acceleration of net migration would tend to boost income per capita of those deriving income primarily from agriculture simply because the farm population would be smaller. This is illustrated, for example, in the past decade. While the net income of farm operators averaged \$2,547 in 1959, slightly higher than in 1950, this was possible because the number of farm operators declined 18 per cent during the decade.

The potential rewards to farmers and to the entire economy of attempting to solve the problems of farm surpluses and relatively low income to labor in the agricultural sector by increasing the mobility of the labor force are indeed great. While farm population and the farm labor force have been declining, the decline has not been rapid enough to enable either farmers or others to reap all the potential benefits which flow from the spectacular advance in mechanization and other technology applicable to the production of agricultural commodities. If the potential reward is realized, it will be largely in the form of increased supplies of non-agricultural commodities and services for which demand is increasing, produced by the labor released from the farm sector and increased income *per capita* of those who continue to produce agricultural commodities. To be utilized effectively in nonagricultural employment, this labor, at least in part, will need to migrate from rural to urban areas. In part, also, the adjustment can be achieved by industrial development in rural areas and by improvements in transportation on the fringes of urban areas. Sound measures which would help to accelerate such adjustments will also augment the rate of economic growth of the United States.

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